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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number

10/602,777

Filing Date

June 25, 2003

First Named Inventor

Scott A. MOSKOWITZ

Art Unit

2132

Examiner Name

Laurel L. LASHLEY

Attorney Docket Number

80391.0003

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## U. S. PATENT DOCUMENTS

| Examiner Initials* | Cite No. <sup>1</sup> | Document Number                          | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|--------------------|-----------------------|--|--------------------------------|--|---|
|                    |                       | Number-Kind Code <sup>2</sup> (if known) |                                |  |   |
|                    |                       | US-4,939,515                             | 07/03/1990                     | Adelson  |   |
|                    |                       | US-5,161,210                             | 11/03/1992                     | Druyvesteyn, et. al.                               |   |
|                    |                       | US-5,450,490                             | 09/12/1995                     | Jensen et. al.                                     |   |
|                    |                       | US-5,530,751                             | 06/25/1996                     | Morris   |   |
|                    |                       | US-5,579,124                             | 11/26/1996                     | Aijala et. al.                                     |   |
|                    |                       | US-5,721,788                             | 02/24/1998                     | Powell et. al.                                     |   |
|                    |                       | US-5,828,325                             | 10/27/1998                     | Wplose Wicz et. al.                                |   |
|                    |                       | US-5,912,972                             | 06/15/1999                     | Barton   |   |
|                    |                       | US-5,930,377                             | 07/27/1999                     | Powell et. al.                                     |   |
|                    |                       | US-5,583,488                             | 12/10/1996                     | Sala et. al.                                       |   |
|                    |                       | US-5,748,783                             | 05/05/1998                     | Rhoads   |   |
|                    |                       | US-6,330,672                             | 12/11/2001                     | Shur   |   |
|                    |                       | US-5,243,423                             | 09/07/1993                     | DeJean et. al.                                     |   |
|                    |                       | US-5,319,735                             | 06/07/1994                     | Preuss, et. al.                                    |   |
|                    |                       | US-5,113,437                             | 05/12/1992                     | Best et. al.                                       |   |
|                    |                       | US-4,876,617                             | 10/24/1989                     | Best et. al.                                       |   |
|                    |                       | US-5,379,345                             | 01/03/1995                     | Greenberg  |   |
|                    |                       | US-5,646,997                             | 07/08/1997                     | Barton   |   |
|                    |                       | US-4,672,605                             | 06/09/1987                     | Hustig et. al.                                     |   |

## FOREIGN PATENT DOCUMENTS

| Examiner Initials* | Cite No. <sup>1</sup> | Foreign Patent Document   | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>Or Relevant Figures Appear | T <sup>6</sup> |
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|                    |                       | Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known) |                                |  |   |                |
|                    |                       | European Patent No. EP0565947A1   | 10/20/1993                     | Kuusama, Juha                                      |   |                |
|                    |                       | WO 95/14289   | 05/26/1995                     | Rhoads, Geoffrey                                   |   |                |
|                    |                       | European Patent No. 0581317A2   | 02/02/1994                     | Powell, Robert et. al.                             |   |                |
|                    |                       | European Patent No. 0372601A1   | 06/13/1990                     | Druyvesteyn, Wm: et. al.                           |   |                |
|                    |                       | W098/37513  | 08/27/1998                     | Biggar, Michael et. al.                            |   |                |
|                    |                       | European Patent No. 0651554A  | 05/03/1995                     | Eastman Kodak Co.                                  |   |                |

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|--------------------|-----------------------|--|--------------------------------|--|---|
|                    |                       | Number-Kind Code <sup>2</sup> (if known) |                                |  |   |
|                    |                       | US-4,748,668                             | 05/31/1998                     | Shamir, et.al.                                     |   |
|                    |                       | US-4,789,928                             | 12/06/1988                     | Fujisaki   |   |
|                    |                       | US-4,908,873                             | 03/13/1990                     | Philibert, et.al.                                  |   |
|                    |                       | US-4,980,782                             | 12/25/1990                     | Ginkel   |   |
|                    |                       | US-5,073,925                             | 12/17/1991                     | Nagata, et.al.                                     |   |
|                    |                       | US-5,243,515                             | 09/07/1993                     | Lee  |   |
|                    |                       | US-5,287,407                             | 02/15/1994                     | Holmes   |   |
|                    |                       | US-5,428,606                             | 06/27/1995                     | Moskowitz  |   |
|                    |                       | US-5,365,586                             | 11/15/1994                     | Indeck, et.al.                                     |   |
|                    |                       | US-5,394,324                             | 02/28/1995                     | Clearwater   |   |
|                    |                       | US-5,408,505                             | 04/18/1995                     | Indeck, et.al.                                     |   |
|                    |                       | US-5,412,718                             | 05/02/1995                     | Narasimhalv, et.al.                                |   |
|                    |                       | US-5,487,168                             | 01/23/1996                     | Geiner, et.al.                                     |   |
|                    |                       | US-5,493,677                             | 02/20/1996                     | Balogh, et.al.                                     |   |
|                    |                       | US-5,530,759                             | 06/25/1996                     | Braudaway, et.al.                                  |   |
|                    |                       | US-5,606,609                             | 02/25/1997                     | Houser, et.al.                                     |   |
|                    |                       | US-5,613,004                             | 03/18/1997                     | Cooperman, et.al.                                  |   |
|                    |                       | US-5,617,119                             | 04/01/1997                     | Briggs, et.al.                                     |   |
|                    |                       | US-                                      |                                |  |   |

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|                    |                       | WO 99/62044   | 12/02/1999                     | Handel, Theodore et.al                             |   |                |
|                    |                       | WIPO 96/29795   | 09/26/1996                     | Micali   |   |                |
|                    |                       | WIPO 97/24833   | 07/10/1997                     | Micali   |   |                |
|                    |                       | EP 0649261  | 04/19/1995                     | Enari  |   |                |
|                    |                       | NL 100523   | 09/1998                        |  |   |                |

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Sheet 3 of 13

Application Number 10/602,777  
 Filing Date June 25, 2003  
 First Named Inventor Scott A. MOSKOWITZ  
 Art Unit 2132  
 Examiner Name Laurel L. LASHLEY  
 Attorney Docket Number 80391.0003

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|--------------------|-----------------------|--|--------------------------------|--|---|
|                    |                       | Number-Kind Code <sup>2</sup> (if known) |                                |  |   |
|                    |                       | US-4,528,588                             | 07/09/1985                     | Lofberg  |   |
|                    |                       | US-5,832,119                             | 11/03/1998                     | Rhoads   |   |
|                    |                       | US-5,859,920                             | 01/12/1999                     | Daly et.al   |   |
|                    |                       | US-4,979,210                             | 12/18/1990                     | Nagata et.al                                       |   |
|                    |                       | US-5,774,452                             | 06/30/1998                     | Wolosewicz   |   |
|                    |                       | US-4,405,829                             | 09/20/1983                     | Rivest et.al                                       |   |
|                    |                       | US-6,330,335                             | 12/11/2001                     | Rhoads   |   |
|                    |                       | US-3,986,624                             | 10/19/1976                     | Cates Jr. et.al                                    |   |
|                    |                       | US-5,363,448                             | 11/08/1994                     | Koopman et.al                                      |   |
|                    |                       | US-5,568,570                             | 10/22/1996                     | Rabbani  |   |
|                    |                       | US-5,636,292                             | 06/03/1997                     | Rhoads   |   |
|                    |                       | US-4,972,471                             | 11/20/1990                     | Gross et.al.                                       |   |
|                    |                       | US-5,893,067                             | 04/06/1999                     | Bender et.al.                                      |   |
|                    |                       | US-5,689,587                             | 11/18/1997                     | Bender et.al.                                      |   |
|                    |                       | US-3,984,624                             | 10/05/1976                     | Waggener   |   |
|                    |                       | US-4,038,596                             | 07/26/1977                     | Lee  |   |
|                    |                       | US-4,200,770                             | 04/29/1980                     | Hellman, et.al.                                    |   |
|                    |                       | US-4,218,582                             | 08/19/1980                     | Hellman, et.al.                                    |   |
|                    |                       | US-4,424,414                             | 01/03/1984                     | Hellman, et.al.                                    |   |

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|                    |                       | WO 9744736  | 11/27/1997                     | Wehrenberg   |   |                |
|                    |                       | WO 9952271  | 10/14/1999                     | Moskowitz  |   |                |
|                    |                       | WO 9963443  | 12/09/1999                     | Ho, Anthony Tung Shuen                             |   |                |
|                    |                       |   |                                |  |   |                |
|                    |                       |   |                                |  |   |                |
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|-----------------------|--------------------------|--|--------------------------------|--|---|
|                       |                          | Number-Kind Code <sup>2</sup> (if known) |                                |  |   |
|                       |                          | US-5,640,569                             | 06/17/1997                     | Miller, et.al.                                     |   |
|                       |                          | US-5,659,726                             | 08/19/1997                     | Sandford, II, et.al                                |   |
|                       |                          | US-5,664,018                             | 09/02/1997                     | Leighton   |   |
|                       |                          | US-5,687,236                             | 11/11/1997                     | Moskowitz, et.al.                                  |   |
|                       |                          | US-5,734,752                             | 03/31/1998                     | Knox   |   |
|                       |                          | US-5,745,569                             | 04/28/1998                     | Moskowitz, et.al                                   |   |
|                       |                          | US-5,506,795                             | 04/09/1996                     | Yamakawa   |   |
|                       |                          | US-5,680,462                             | 10/21/1997                     | Miller, et.al                                      |   |
|                       |                          | US-5,696,828                             | 12/09/1997                     | Koopman, Jr.                                       |   |
|                       |                          | US-5,740,244                             | 04/14/1998                     | Indeck, et.al.                                     |   |
|                       |                          | US-5,751,811                             | 05/12/1998                     | Koopman, Jr.                                       |   |
|                       |                          | US-5,757,923                             | 05/26/1998                     | Koopman, Jr.                                       |   |
|                       |                          | US-5,889,868                             | 03/30/1999                     | Moskowitz, et.al.                                  |   |
|                       |                          | US-6,208,745                             | 03/27/2001                     | Florenio, et.al.                                   |   |
|                       |                          | US-6,285,775                             | 09/04/2001                     | Wu, et.al.   |   |
|                       |                          | US-6,385,329                             | 05/07/2002                     | Sharma, et.al                                      |   |
|                       |                          | US-6,530,021                             | 03/04/2003                     | Epstein, et.al.                                    |   |
|                       |                          | US-6,425,081                             | 07/23/2002                     | wamura   |   |
|                       |                          | US-                                      |                                |  |   |

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|                       |                          | Number-Kind Code <sup>2</sup> (if known) |                                |  |   |
|                       |                          | US-6,522,769                             | 02/18/2003                     | Rhoads, et.al.                                     |   |
|                       |                          | US-2005/0160271                          | 07/21/2005                     | Brundage, et.al                                    |   |
|                       |                          | US-6,665,489                             | 12/16/2003                     | Collart  |   |
|                       |                          | US-2004/0128514                          | 07/01/2004                     | Rhoads   |   |
|                       |                          | US-2004/0037449                          | 02/26/2004                     | Davis, et.al.                                      |   |
|                       |                          | US-6,823,455                             | 11/23/2004                     | Macy, et.al.                                       |   |
|                       |                          | US-2003/0133702                          | 07/17/2003                     | Collart  |   |
|                       |                          | US-6,668,246                             | 12/23/2003                     | Yeung, et.al.                                      |   |
|                       |                          | US-6,405,203                             | 06/11/2002                     | Collart  |   |
|                       |                          | US-6,141,754                             | 10/31/2000                     | Choy   |   |
|                       |                          | US-6,493,457                             | 12/10/2002                     | Quackenbush  |   |
|                       |                          | US-5,629,980                             | 05/13/1997                     | Stefik, et.al.                                     |   |
|                       |                          | US-5,943,422                             | 08/24/1999                     | Van Wie, et.al.                                    |   |
|                       |                          | US-5,636,276                             | 06/03/1997                     | Brugger  |   |
|                       |                          | US-5,341,429                             | 08/23/1994                     | Stringer, et.al.                                   |   |
|                       |                          | US-6,754,822                             | 06/22/2004                     | Zhao   |   |
|                       |                          | US-6,131,162                             | 10/10/2000                     | Yoshiura et.al.                                    |   |
|                       |                          | US-7,058,570                             | 06/06/2006                     | Yu, et.al.   |   |
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**FOREIGN PATENT DOCUMENTS**

| Examiner<br>Initials* | Cite<br>No. <sup>1</sup> | Foreign Patent Document   | Publication<br>Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>Or Relevant Figures Appear | T <sup>6</sup> |
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**INFORMATION DISCLOSURE  
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**Complete if Known**

Application Number

10/602,777

Filing Date

June 25, 2003

First Named Inventor

Scott A. MOSKOWITZ

Art Unit

2132

Examiner Name

Laurel L. LASHLEY

Attorney Docket Number

80391.0003

Sheet 6 of 14**U. S. PATENT DOCUMENTS**

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|-----------------------|--------------------------|--|--------------------------------|--|---|
|                       |                          | Number-Kind Code <sup>2</sup> (if known) |                                |  |   |
|                       |                          | US-5,930,369                             | 07/27/1999                     | Cox, et al.  |   |
|                       |                          | US-6,415,041                             | 07/02/2002                     | Oami, et al.                                       |   |
|                       |                          | US-6,141,753                             | 10/31/2000                     | Zhao, et al.                                       |   |
|                       |                          | US-2002/0097873                          | 07/25/2002                     | Petrovic   |   |
|                       |                          | US-6,785,815                             | 08/31/2004                     | Serret-Avila, et al.                               |   |
|                       |                          | US-6,523,113                             | 02/18/2003                     | Wehrenberg   |   |
|                       |                          | US-6,233,347                             | 05/15/2001                     | Chen, et al.                                       |   |
|                       |                          | US-6,233,684                             | 05/15/2001                     | Stefik, et al.                                     |   |
|                       |                          | US-2006/0013395                          | 01/19/2006                     | Brundage, et al.                                   |   |
|                       |                          | US-7,043,050                             | 05/09/2006                     | Yuval  |   |
|                       |                          | US-5,809,160                             | 09/15/1998                     | Powell, et al.                                     |   |
|                       |                          | US-6,272,634                             | 08/07/2001                     | Tewfik, et al.                                     |   |
|                       |                          | US-6,282,650                             | 08/28/2001                     | Davis  |   |
|                       |                          | US-6,557,103                             | 04/29/2003                     | Boncelet, Jr., et al.                              |   |
|                       |                          | US-2003/0126445                          | 07/03/2003                     | Wehrenberg   |   |
|                       |                          | US-6,978,370                             | 12/20/2005                     | Kocher   |   |
|                       |                          | US-2006/0005029                          | 01/05/2006                     | Petrovic, et al.                                   |   |
|                       |                          | US-6,278,791                             | 08/21/2001                     | Honsinger, et al.                                  |   |
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| Application Number     | 10/602,777         |
| Filing Date            | June 25, 2003      |
| First Named Inventor   | Scott A. MOSKOWITZ |
| Art Unit               | 2132               |
| Examiner Name          | Laurel L. LASHLEY  |
| Attorney Docket Number | 80391.0003         |

Sheet 7 of 14**U. S. PATENT DOCUMENTS**

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|                       |                          | US-6,061,793                             | 05/09/2000                     | fewfik, et.al                                      |   |
|                       |                          | US-5,809,139                             | 09/15/1998                     | Grirod, et.al.                                     |   |
|                       |                          | US-5,848,155                             | 12/08/1998                     | Cox  |   |
|                       |                          | US-5,915,027                             | 06/22/1999                     | Cox, et.al   |   |
|                       |                          | US-5,940,134                             | 08/17/1999                     | Wirtz  |   |
|                       |                          | US-5,991,426                             | 11/23/1999                     | Cox, et.al.  |   |
|                       |                          | US-6,069,914                             | 05/30/2000                     | Cox  |   |
|                       |                          | US-5,943,422                             | 08/24/1999                     | Van Wie, et.al.                                    |   |
|                       |                          | US-6,539,475                             | 03/25/2003                     | Cox, et.al.  |   |
|                       |                          | US-6,310,962                             | 10/30/2001                     | chung, et.al.                                      |   |
|                       |                          | US-6,154,571                             | 11/28/2000                     | Cox, et.al.  |   |
|                       |                          | US-4,969,204                             | 11/06/1990                     | Jones, et.al.                                      |   |
|                       |                          | US-6,687,683                             | 02/03/2004                     | Harada, et.al.                                     |   |
|                       |                          | US-6,373,892                             | 04/16/2002                     | ichien, et.al.                                     |   |
|                       |                          | US-5,870,474                             | 02/09/1999                     | Wasilewski, et.al.                                 |   |
|                       |                          | US-5,418,713                             | 05/23/1995                     | Allen  |   |
|                       |                          | US-6,078,664                             | 06/20/2000                     | Moskowitz, et.al.                                  |   |
|                       |                          | US-6,009,176                             | 12/28/1999                     | Gennaro, et.al.                                    |   |
|                       |                          | US-6,081,587                             | 06/27/2000                     | Hoffstein, et.al.                                  |   |

**FOREIGN PATENT DOCUMENTS**

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# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

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Application Number

10/602,777

Filing Date

June 25, 2003

First Named Inventor

Scott A. MOSKOWITZ

Art Unit

2132

Examiner Name

Laurel L. LASHLEY

Attorney Docket Number

80391.0003

Sheet

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|                       |                          | US-6,598,162                             | 07/22/2003                     | Moskowitz  |   |
|                       |                          | US-6,275,988                             | 08/14/2001                     | Nagashima, et al.                                  |   |
|                       |                          | US-6,051,029                             | 04/18/2000                     | Paterson, et al.                                   |   |
|                       |                          | US-5,917,915                             | 06/29/1999                     | Hirose   |   |
|                       |                          | US-6,775,772                             | 08/10/2004                     | Binding, et al.                                    |   |
|                       |                          | US-6,668,246                             | 12/23/2003                     | Yeung, et al.                                      |   |
|                       |                          | US-6,351,765                             | 02/26/2002                     | Pietropaolo, et al.                                |   |
|                       |                          | US-6,049,838                             | 04/11/2000                     | Miller, et al.                                     |   |
|                       |                          | US-5,398,285                             | 03/14/1995                     | Borgelt, et al.                                    |   |
|                       |                          | US-5,737,733                             | 04/07/1998                     | Eller  |   |
|                       |                          | US-2002/0103883                          | 08/01/2002                     | Haverstock, et al.                                 |   |
|                       |                          | US-5,673,316                             | 09/30/1997                     | Auerbach, et al.                                   |   |
|                       |                          | US-6,647,424                             | 11/11/2003                     | Pearson, et al.                                    |   |
|                       |                          | US-6,977,894                             | 12/20/2005                     | Achilles, et al.                                   |   |
|                       |                          | US-6,453,252                             | 09/17/2002                     | Laroche  |   |
|                       |                          | US-5,077,665                             | 12/31/1991                     | Silverman, et al.                                  |   |
|                       |                          | US-5,136,581                             | 08/04/1992                     | Muehrcke   |   |
|                       |                          | US-5,341,477                             | 08/23/1994                     | Pitkin, et al.                                     |   |
|                       |                          | US-5,581,703                             | 12/03/1996                     | Baughner, et al.                                   |   |

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Sheet 4 of 14

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| Application Number     | 10/602,777         |
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| First Named Inventor   | Scott A. MOSKOWITZ |
| Art Unit               | 2132               |
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|                    |                       | Number-Kind Code <sup>2</sup> (if known) |                                |  |   |
|                    |                       | US-5,548,579                             | 08/20/1996                     | Lebrun, et al.                                     |   |
|                    |                       | US-5,905,975                             | 05/18/1999                     | Ausubel  |   |
|                    |                       | US-6,457,058                             | 09/24/2002                     | Ullum et al.                                       |   |
|                    |                       | US-6,381,618                             | 04/30/2002                     | Jones et al.                                       |   |
|                    |                       | US-2002/0026343                          | 02/28/2002                     | Duenke   |   |
|                    |                       | US-6,230,268                             | 05/08/2001                     | Miwa et al.  |   |
|                    |                       | US-6,199,058                             | 03/06/2001                     | Wong et al.  |   |
|                    |                       | US-5,920,900                             | 07/06/1999                     | Poole et al.                                       |   |
|                    |                       | US-5,884,033                             | 03/16/1999                     | Duvall et al.                                      |   |
|                    |                       | US-5,478,990                             | 12/26/1995                     | Montanari et al.                                   |   |
|                    |                       | US-6,430,302                             | 08/06/2002                     | Rhoads   |   |
|                    |                       | US-6,725,372                             | 04/20/2004                     | Lewis et al.                                       |   |
|                    |                       | US-6,606,393                             | 08/12/2003                     | Xie et al.   |   |
|                    |                       | US-6,584,125                             | 06/24/2003                     | Katto  |   |
|                    |                       | US-6,442,283                             | 08/27/2002                     | Tewfik et al.                                      |   |
|                    |                       | US-6,377,625                             | 04/23/2002                     | Kim  |   |
|                    |                       | US-6,282,300                             | 08/28/2001                     | Bloom et al.                                       |   |
|                    |                       | US-6,205,249                             | 03/20/2001                     | Moskowitz  |   |
|                    |                       | US-6,029,126                             | 02/22/2000                     | Malvar   |   |

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Sheet 10 of 14

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| Examiner Initials* | Cite No. <sup>1</sup> | Document Number                          | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|--------------------|-----------------------|--|--------------------------------|--|---|
|                    |                       | Number-Kind Code <sup>2</sup> (if known) |                                |  |   |
|                    |                       | US-5,754,697                             | 05/19/1998                     | Fu et al.  |   |
|                    |                       | US-5,479,210                             | 12/26/1995                     | Cawley et al.                                      |   |
|                    |                       | US-3,947,825                             | 03/30/1976                     | Cassada  |   |
|                    |                       | US-5,903,721                             | 05/11/1999                     | Sixtus   |   |
|                    |                       | US-5,790,677                             | 08/04/1998                     | Fox et al.   |   |
|                    |                       | US-5,243,515                             | 09/07/1993                     | Clearwater   |   |
|                    |                       | US-4,339,134                             | 07/13/1982                     | Macheel  |   |
|                    |                       | US-4,827,508                             | 05/02/1989                     | Shear  |   |
|                    |                       | US-4,896,275                             | 01/23/1990                     | Jackson  |   |
|                    |                       | US-4,977,594                             | 12/11/1990                     | Shear  |   |
|                    |                       | US-5,050,213                             | 09/17/1991                     | Shear  |   |
|                    |                       | US-5,369,707                             | 11/29/1994                     | Follendore, III                                    |   |
|                    |                       | US-5,406,627                             | 04/11/1995                     | Thompson et al.                                    |   |
|                    |                       | US-5,410,598                             | 04/25/1995                     | Shear  |   |
|                    |                       | US-5,469,536                             | 11/21/1995                     | Blank  |   |
|                    |                       | US-5,497,419                             | 03/05/1996                     | Hill   |   |
|                    |                       | US-5,513,261                             | 04/30/1996                     | Maher  |   |
|                    |                       | US-5,530,739                             | 06/25/1996                     | Okada  |   |
|                    |                       | US-5,598,470                             | 01/28/1997                     | Cooper et al.                                      |   |

**FOREIGN PATENT DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Foreign Patent Document   | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>Or Relevant Figures Appear | T <sup>6</sup> |
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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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| Application Number     | 10/602,777         |
| Filing Date            | June 25, 2003      |
| First Named Inventor   | Scott A. MOSKOWITZ |
| Art Unit               | 2132               |
| Examiner Name          | Laurel L. LASHLEY  |
| Attorney Docket Number | 80391.0003         |

Sheet 11 of 14**U. S. PATENT DOCUMENTS**

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|--------------------|-----------------------|--|--------------------------------|--|---|
|                    |                       | Number-Kind Code <sup>2</sup> (if known) |                                |  |   |
|                    |                       | US-5,625,690                             | 04/29/1997                     | Michel et al.                                      |   |
|                    |                       | US-5,633,932                             | 05/27/1997                     | Davis et al.                                       |   |
|                    |                       | US-5,719,937                             | 02/17/1998                     | Warren et al.                                      |   |
|                    |                       | US-5,737,416                             | 04/07/1998                     | Cooper et al.                                      |   |
|                    |                       | US-5,765,152                             | 06/09/1998                     | Erickson   |   |
|                    |                       | US-5,799,083                             | 08/25/1998                     | Brothers et al.                                    |   |
|                    |                       | US-5,973,731                             | 10/26/1999                     | Schwab   |   |
|                    |                       | US-5,894,521                             | 04/13/1999                     | Conley   |   |
|                    |                       | US-5,905,800                             | 05/18/1999                     | Moskowitz et al.                                   |   |
|                    |                       | US-5,963,909                             | 10/05/1999                     | Warren et al.                                      |   |
|                    |                       | US-5,974,141                             | 10/26/1999                     | Saito  |   |
|                    |                       | US-5,999,217                             | 12/07/1999                     | Berners-Lee  |   |
|                    |                       | US-6,041,316                             | 03/21/2000                     | Allen  |   |
|                    |                       | US-6,081,251                             | 06/27/2000                     | Sakai et al.                                       |   |
|                    |                       | US-6,278,780                             | 08/21/2001                     | Shimada  |   |
|                    |                       | US-6,301,663                             | 10/09/2001                     | Kato et al.  |   |
|                    |                       | US-6,240,121                             | 05/29/2001                     | Senoh  |   |
|                    |                       | US-                                      |                                |  |   |
|                    |                       | US-                                      |                                |  |   |

**FOREIGN PATENT DOCUMENTS**

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| Substitute for form 1449/PTO<br><br><h2 style="text-align: center;">INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</h2> <p style="text-align: center;">(Use as many sheets as necessary)</p> |                    | <div style="text-align: right; font-weight: bold;">Con</div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Application Number</td> <td>10/602,777</td> </tr> <tr> <td>Filing Date</td> <td>June 25, 2003</td> </tr> <tr> <td>First Named Inventor</td> <td>Scott A. MOSKOWITZ</td> </tr> <tr> <td>Art Unit</td> <td>2132</td> </tr> <tr> <td>Examiner Name</td> <td>Laurel L. LASHLEY</td> </tr> <tr> <td>Attorney Docket Number</td> <td>80391.0003</td> </tr> </table> |    | Application Number | 10/602,777 | Filing Date | June 25, 2003 | First Named Inventor | Scott A. MOSKOWITZ | Art Unit | 2132 | Examiner Name | Laurel L. LASHLEY | Attorney Docket Number | 80391.0003 |
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| First Named Inventor  | Scott A. MOSKOWITZ |  |    |                    |            |             |               |                      |                    |          |      |               |                   |                        |            |
| Art Unit  | 2132               |  |    |                    |            |             |               |                      |                    |          |      |               |                   |                        |            |
| Examiner Name   | Laurel L. LASHLEY  |  |    |                    |            |             |               |                      |                    |          |      |               |                   |                        |            |
| Attorney Docket Number  | 80391.0003         |  |    |                    |            |             |               |                      |                    |          |      |               |                   |                        |            |
| Sheet   | 12                 | of   | 14 |                    |            |             |               |                      |                    |          |      |               |                   |                        |            |

| U. S. PATENT DOCUMENTS |                       |  |                                |  |   |
|------------------------|-----------------------|--|--------------------------------|--|---|
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|                        |                       | Number-Kind Code <sup>2</sup> (if known) |                                |  |   |
|                        |                       | US- 6,088,455                            | 07/11/2000                     | Logan et al.                                       |   |
|                        |                       | US- 5,634,040                            | 05/27/1997                     | Her et al.   |   |
|                        |                       | US- 6,381,747                            | 04/30/2002                     | Wonfor et al.                                      |   |
|                        |                       | US- 4,969,204                            | 11/06/1990                     | Melnychuck et al.                                  |   |
|                        |                       | US- 6,966,002                            | 11/15/2005                     | Tornubia-Saez                                      |   |
|                        |                       | US- 6,263,313                            | 07/17/2001                     | Milstead, et al.                                   |   |
|                        |                       | US- 7,093,295                            | 08/15/2006                     | Saito  |   |
|                        |                       | US- 6,587,837                            | 07/01/2003                     | Spagna et al.                                      |   |
|                        |                       | US- 6,931,534                            | 08/16/2005                     | Jandel et al.                                      |   |
|                        |                       | US- 2004/0049695                         | 03/11/2004                     | Choi et al.  |   |
|                        |                       | US- 2004/0083369                         | 07/25/2003                     | Erlingsson et al.                                  |   |
|                        |                       | US- 5,677,952                            | 10/14/1997                     | Blakely et al.                                     |   |
|                        |                       | US- 5,768,396                            | 06/16/1998                     | Sone   |   |
|                        |                       | US- 7,266,697                            | 09/04/2007                     | Kirovski et al.                                    |   |
|                        |                       | US- 5,136,646                            | 08/04/1992                     | Haber et al.                                       |   |
|                        |                       | US- 5,136,647                            | 08/04/1992                     | Haber et al.                                       |   |
|                        |                       | US- 7,206,649                            | 04/17/2007                     | Kirovski et al.                                    |   |
|                        |                       | US- 6,532,284                            | 03/11/2003                     | Walker et al.                                      |   |
|                        |                       | US- 7,020,285                            | 03/28/2006                     | Kirovski et al.                                    |   |

| FOREIGN PATENT DOCUMENTS |                       |   |                                |  |   |                |
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| First Named Inventor   |  |
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|                    |                       | Number-Kind Code <sup>2</sup> (if known) |                                |  |   |
|                    |                       | US- 7,046,808                            | 05/12/2006                     | Metois et al.                                      |   |
|                    |                       | US- 6,430,301                            | 08/06/2002                     | Petrovic   |   |
|                    |                       | US- 2004/0059918                         | 03/25/2004                     | Xu   |   |
|                    |                       | US- 6,345,100                            | 02/05/2002                     | Levine   |   |
|                    |                       | US- 2004/0093521                         | 05/13/2004                     | Hamadeh et al.                                     |   |
|                    |                       | US- 2007/0083467                         | 04/12/2007                     | Lindahl et al.                                     |   |
|                    |                       | US- 7,231,524                            | 06/12/2007                     | Burns  |   |
|                    |                       | US- 2005/0246554                         | 11/03/2005                     | Batson   |   |
|                    |                       | US- 6,668,325                            | 02/23/2003                     | Collberg et al.                                    |   |
|                    |                       | US- 7,050,396                            | 05/23/2006                     | Cohen et al.                                       |   |
|                    |                       | US- 6,842,862                            | 01/11/2005                     | Chow et al.  |   |
|                    |                       | US- 7,051,208                            | 05/23/2006                     | Venkatesan et al.                                  |   |
|                    |                       | US- 7,240,210                            | 07/03/2007                     | Michak et al.                                      |   |
|                    |                       | US- 7,150,003                            | 12/12/2006                     | Naumovich et al.                                   |   |
|                    |                       | US- 6,389,538                            | 05/14/2002                     | Gruse et al.                                       |   |
|                    |                       | US- 5,513,126                            | 04/30/1996                     | Harkins et al.                                     |   |
|                    |                       | US- 5,657,461                            | 08/12/1997                     | Harkins et al.                                     |   |
|                    |                       | US- 4,390,898                            | 06/28/1983                     | Bond et al.  |   |
|                    |                       | US- 5,471,533                            | 11/28/1995                     | Wang et al.  |   |

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Sheet 14 of 14

**Comp**

Application Number 10/602,777  
 Filing Date June 25, 2003  
 First Named Inventor Scott A. MOSKOWITZ  
 Art Unit 2132  
 Examiner Name Laurel L. LASHLEY  
 Attorney Docket Number 80391.0003

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|                    |                       | US- 6,044,471                            | 03/28/2000                     | Colvin   |   |
|                    |                       | US- 7,103,184                            | 09/05/2006                     | Jian   |   |
|                    |                       | US- 7,233,669                            | 06/19/2007                     | Candelore  |   |
|                    |                       | US- 6,446,211                            | 09/03/2002                     | Colvin   |   |
|                    |                       | US- 6,484,264                            | 11/19/2002                     | Colvin   |   |
|                    |                       | US- 6,502,195                            | 12/31/2002                     | Colvin   |   |
|                    |                       | US- 6,785,825                            | 08/31/2004                     | Colvin   |   |
|                    |                       | US- 6,792,548                            | 09/14/2004                     | Colvin   |   |
|                    |                       | US- 6,792,549                            | 09/14/2004                     | Colvin   |   |
|                    |                       | US- 6,795,925                            | 09/21/2004                     | Colvin   |   |
|                    |                       | US- 6,799,277                            | 09/28/2004                     | Colvin   |   |
|                    |                       | US- 6,813,717                            | 11/02/2004                     | Colvin   |   |
|                    |                       | US- 6,813,718                            | 11/02/2004                     | Colvin   |   |
|                    |                       | US- 6,857,078                            | 02/15/2005                     | Colvin   |   |
|                    |                       | US- 6,986,063                            | 01/10/2006                     | Colvin   |   |
|                    |                       | US- 2004/0117628                         | 06/17/2004                     | Colvin   |   |
|                    |                       | US- 2004/0117664                         | 06/17/2004                     | Colvin   |   |
|                    |                       | US- 2004/0225894                         | 11/11/2004                     | Colvin   |   |
|                    |                       | US- 7,177,430                            | 02/13/2007                     | Kim  |   |

## **FOREIGN PATENT DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Foreign Patent Document   | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>Or Relevant Figures Appear | T <sup>6</sup> |
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Application Number

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First Named Inventor

Art Unit

Examiner Name

Attorney Docket Number

10/602,777

June 25, 2003

Scott A. MOSKOWITZ

2132

Laurel L. LASHLEY

80391.0003

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|-----------------------|--------------------------|---|----------------|
|                       |                          | Schneier, Bruce, Applied Cryptography, 2nd Ed., John Wiley & Sons, pp. 9-10, 1996   |                |
|                       |                          | Menezes, Alfred J., Handbook of Applied Cryptography, CRC Press, p. 46, 1997  |                |
|                       |                          | Merriam-Webster's Collegiate Dictionary, 10th Ed., Merriam Webster, Inc., p.207   |                |
|                       |                          | Brealy, et al., Principles of Corporate Finance, "Appendix A-Using Option Valuation Models", 1984, pp. 448-449  |                |
|                       |                          | Copeland, et al., Real Options: A Practitioner's Guide, 2001 pp. 106-107, 201-202, 204-208.   |                |
|                       |                          | Sarkar, M. "An Assessment of Pricing Mechanisms for the Internet-A Regulatory Imperative", presented MIT Workshop on Internet Economics, Mar. 1995. <a href="http://www.press.umich.edu/ien/works/SarkAsses.html">http://www.press.umich.edu/ien/works/SarkAsses.html</a> on      |                |
|                       |                          | Crawford, D.W. "Pricing Network Usage: A Market for Bandwidth of Market Communication?" presented MIT Workshop on Internet Economics, Mar. 1995. <a href="http://www.press.umich.edu/ien/works/CrawMarket.html">http://www.press.umich.edu/ien/works/CrawMarket.html</a> on March |                |
|                       |                          | LOW, S.H., "Equilibrium Allocation and Pricing of Variable Resources Among User-Suppliers", 1988. <a href="http://www.citeseer.nj.nec.com/366503.html">http://www.citeseer.nj.nec.com/366503.html</a>   |                |
|                       |                          | Caronni, Germano, "Assuring Ownership Rights for Digital Images", published proceeds of reliable IT systems, v15 '95, H.H. Bruggemann and W. Gerhardt-Hackel (Ed.) Viewing Publishing Company Germany 1995  |                |
|                       |                          | Zhao, Jian. "A WWW Service to Embed and Prove Digital Copyright Watermarks", Proc. of the european conf. on Multimedia Applications, Services & Techniques Louvain-la-Neuve Belgium May 1996  |                |

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|--------------------|-----------------------|---|----------------|
|                    |                       | Gruhl, Daniel et al., Echo Hiding. In Proceeding of the Workshop on Information Hiding. No. 1174 in Lecture Notes in Computer Science, Cambridge, England (May/June 1996)   |                |
|                    |                       | Oomen, A.W.J. et al., A Variable Bit Rate Buried Data Channel for Compact Disc, J.Audio Eng.Sc., Vol.43, No.1/2, pp. 23-28 (1995).  |                |
|                    |                       | Ten Kate, W. et al., A New Surround-Stereo-Surround Coding Techniques, J. Audio Eng.Soc., Vol. 40, No. 5, pp. 376-383 (1992)  |                |
|                    |                       | Gerzon, Michael et al., A High Rate Buried Data Channel for Audio CD, presentation notes, Audio Engineering Soc. 94th Convention (1993).  |                |
|                    |                       | Sklar, Bernard, Digital Communications, pp. 601-603 (1988)  |                |
|                    |                       | Jayant, N.S. et al., Digital Coding of Waveforms, Prentice Hall Inc., Englewood Cliffs, NJ, pp. 486-509 (1984)  |                |
|                    |                       | Bender, Walter R. et al., Techniques for Data Hiding, SPIE Int. Soc. Opt. Eng., Vol. 2420, pp. 164-173, 1995.   |                |
|                    |                       | Zhao, Jian et al., Embedding Robust Labels into Images for Copyright Protection, (xp 000571976), pp. 242-251, 1995.   |                |
|                    |                       | Menezes, Alfred J., Handbook of Applied Cryptography, CRC Press, p. 175, 1997.  |                |
|                    |                       | Schneier, Bruce, Applied Cryptography, 1st Ed., pp. 67-68, 1994.  |                |

|                    |  |                 |  |
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|--------------------|--|-----------------|--|

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|   | <b>First Named Inventor</b> |                               | Scott A. MOSKOWITZ              |
|   | <b>Art Unit</b>             |                               | 2132                            |
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|--------------------|-----------------------|---|----------------|
|                    |                       | ten Kate, W. et al., "Digital Audio Carrying Extra Information", IEEE, CH 2847-2/90/0000-1097, (1990)   |                |
|                    |                       | van Schyndel, et al. A digital Watermark, IEEE Int'l Computer Processing Conference, Austin, TX, Nov 13-16, 1994, pp. 86-90   |                |
|                    |                       | Smith, et al. Modulation and Information Hiding in Images, Springer Verlag, 1st Int'l Workshop, Cambridge, UK, May 30-June 1, 1996, pp. 207-227   |                |
|                    |                       | Kutter, Martin et al., Digital Signature of Color Images Using Amplitude Modulation, SPIE-E197, vol. 3022, pp. 518-527  |                |
|                    |                       | Puate, Joan et al., Using Fractal Compression Scheme to Embed a Digital Signature into an Image, SPIE-96 Proceedings, vol. 2915, Mar. 1997, pp. 108-118   |                |
|                    |                       | Swanson, Mitchell D., et al., Transparent Robust Image Watermarking, Proc. of the 1996 IEEE Int'l Conf. on Image Processing, Vol. 111, 1996, pp. 211-214  |                |
|                    |                       | Swanson, Mitchell D., et al. Robust Data Hiding for Images, 7th IEEE Digital Signal Processing Workshop, Leon, Norway. Sept. 1-4, 1996, pp. 37-40   |                |
|                    |                       | Zhao, Jian et al., Embedding Robust Labels into Images for Copyright Protection, Proceeding of the Know Right '95 Conference, pp. 242-251.  |                |
|                    |                       | Koch, E., et al., Towards Robust and Hidden Image Copyright Labeling, 1995 IEEE Workshop on Nonlinear Signal and Image Processing, Jun. 1995 Neos Marmaras pp. 4  |                |
|                    |                       | Van Schyandel, et al., Towards a Robust Digital Watermark, Second Asian Image Processing Conference, Dec. 6-8, 1995, Singapore, Vol. 2, pp. 504-508   |                |

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| <b>Examiner Signature</b> |  | <b>Date Considered</b> |  |
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|                                 |                       | Tirkel, A.Z., A Two-Dimensional Digital Watermark, DICTA '95, Univ. of Queensland, Brisbane, Dec. 5-8, 1995, pp. 7  |                |
|                                 |                       | Tirkel, A.Z., Image Watermarking-A Spread Spectrum Application, ISSSTA '96, Sept. 96, Mainz, German, pp. 6.   |                |
|                                 |                       | O'Ruanaidh, et al. Watermarking Digital Images for Copyright Protection, IEEE Proceedings, Vol. 143, No. 4, Aug. 96, pp. 250-256.   |                |
|                                 |                       | Cox, et al., Secure Spread Spectrum Watermarking for Multimedia, NEC Research Institute, Techinal Report 95-10, pp. 33  |                |
|                                 |                       | Kahn, D., The Code Breakers, The MacMillan Company, 1969, pp. xIII, 81-83, 513, 515, 522-526, 863.  |                |
|                                 |                       | Boney, et al., Digital Watermarks for Audio Signals, EVSIPCO, 96, pp. 473-480.  |                |
|                                 |                       | Dept. of Electrical Engineering, Del Ft University of Technology, Del ft The Netherlands, Cr.C. Langelaar et al., Copy Protection for Multimedia Data based on Labeling Techniques, July 1996, 9 pp.  |                |
|                                 |                       | F. Hartung, et al., Digital Watermarking of Raw and Compressed Video, SPIE Vol. 2952, pp. 205-213.  |                |
|                                 |                       | Craver, et al., Can Invisible Watermarks Resolve Rightful Ownerships? IBM Research Report, RC 20509 (July 25, 1996) 21 pp.  |                |
|                                 |                       | Press, et al., Numerical Recipes In C, Cambridge Univ. Press, 1988, pp. 398-417.  |                |

|                    |  |                 |  |
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|-----------------------|--------------------------|---|----------------|
|                       |                          | Pohlmann, Ken C., Principles of Digital Audio, 3rd Ed., 1995, pp. 32-37, 40-48, 138, 147-149, 332, 333, 364, 499-501, 508-509, 564-571.   |                |
|                       |                          | Pohlmann, Ken C., Principles of Digital Audio, 2nd Ed., 1991, pp. 1-9, 19-25, 30-33, 41-48, 54-57, 86-107, 375-387.   |                |
|                       |                          | Schneier, Bruce, Applied Cryptography, John Wiley & Sons, inc., New York, 1994, pp. 68, 69, 387-392, 1-57, 273-275, 321-324.  |                |
|                       |                          | Boney, et al., Digital Watermarks for Audio Signals, Proceedings of the International Conf. on Multimedia Computing and Systems, June 17-23, 1996, Hiroshima, Japan. 0-8186-7436-9/96. pp. 473-480.   |                |
|                       |                          | Johnson, et al., Transform Permuted Watermarking for Copyright Protection of Digital Video, IEEE Globecom 1998, Nov 8-12, 1998, New York, New York. Vol. 2, 1998. pp. 684-689. (ISBN 0-7803-4985-7).  |                |
|                       |                          | Rivest, et al., "Pay Word and Micromint: Two Simple Micropayment Schemes," MIT Laboratory for Computer Science, Cambridge, MA, May 7, 1996. pp. 1-18.   |                |
|                       |                          | Bender, et al., Techniques for Data Hiding, IBM Systems Journal, Vol. 35, Nos 3 & 4, 1996, pp. 313-336.   |                |
|                       |                          | Moskowitz, Bandwith as Currency, IEEE Multimedia, Jan-Mar 2003, pp. 14-21.  |                |
|                       |                          | Moskowitz, Multimedia Security Technologies for Digital Rights Management, 2006, Academic Press, "Introduction-Digital Rights Management" pp. 3-22  |                |
|                       |                          |   |                |

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|--------------------|-----------------------|---|----------------|
|                    |                       | Tomsich, et al., "Towards a secure and de-centralized digital watermarking infrastructure for the protection of Intellectual Property", in Electronic Commerce and Web Technologies. Proceedings (ECWEB   |                |
|                    |                       | Moskowitz, "What is Acceptable Quality in the Application of Digital Watermarking: Trade-offs of Security, Robustness and Quality", IEEE Computer Society Proceedings of ITCC 2002 April 10 2002 pp 80-84   |                |
|                    |                       | Lemma, et al. "Secure Watermark Embedding through Partial Encryption", International Workshop on Digital Watermarking ("IWDW" 2006). Springer Lecture Notes in Computer Science.2006. (to appear) 13  |                |
|                    |                       | Kocher, et al., "Self Protecting Digital Content", Technical Report from the CRI Content Security Research Initiative, Cryptography Research, Inc. 2002-2003. 14 pages.   |                |
|                    |                       | Sirbu, M. et al., "Net Bill: An Internet Commerce System Optimized for Network Delivered Services", Digest of Papers of the Computer Society Computer Conference (Spring) 5 March 1995 pp 20-25 vol CONF40.   |                |
|                    |                       | Schunter, M. et al., "A Status Report on the SEMPER framework for Secure Electronic Commerce", Computer Networks and ISDN Systems, 30 Sept 1998 pp 1501-1510 Vol 30 No 16-18 NL North Holland   |                |
|                    |                       | Konrad, K. et al., "Trust and Electronic Commerce-more than a technical problem," Proceedings of the 18th IEEE Symposium on Reliable Distributed Systems 19-22 October 1999 pp 360-365 Lausanne   |                |
|                    |                       | Kini, a. et al., "Trust in Electronic Commerce: Definition and Theoretical Considerations", Proceedings of the 31st Hawaii Int'l Conf on System Sciences (Cat. No. 98TB100216). 6-9 January 1998. pp. 51-61. Los  |                |
|                    |                       | Steinauer D. D., et al., "Trust and Traceability in Electronic Commerce", Standard View, Sept 1997, pp 118-124, vol. 5 No. 3, ACM, USA  |                |
|                    |                       | Hartung, et al. "Multimedia Watermarking Techniques", Proceedings of the IEEE, Special Issue, Identification & Protection of Multimedia Information, pp 1079-1107 July 1999 Vol 87 No 7 IEEE  |                |

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|   |   | Filing Date              | 10/602,777                          |                        |            |
|   |   | First Named Inventor     | June 25, 2003<br>Scott A. MOSKOWITZ |                        |            |
|   |   | Art Unit                 | 2132                                |                        |            |
|   |   | Examiner Name            | Laurel L. LASHLEY                   |                        |            |
| Sheet   | 7 | of                       | 8                                   | Attorney Docket Number | 80391.0003 |

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|                                 |                       | Rivest, et al., PayWord and MicroMint: Two simple micropayment schemes, MIT Laboratory for Computer Science, Cambridge, MA 02139, April 27, 2001, pp. 1-18.   |                |
|                                 |                       | Horowitz, et al., The Art of Electronics, 2nd Ed., 1989, pp.7.  |                |
|                                 |                       | Delaigle, J.-F., et al. "Digital Watermarking," Proceedings of the SPIE, vol. 2659, Feb 1, 1996, pp. 99-110 (Abstract).   |                |
|                                 |                       | Schneider, M., et al. "Robust Content Based Digital Signature for Image Authentication," Proceedings of the International Conference on Image Processing (IC. Lausanne), Sept. 16-19, 1996, pp. 227-230. IEEE ISBN:   |                |
|                                 |                       | Cox, I. J., et al. "Secure Spread Spectrum Watermarking for Multimedia," IEEE Transactions on Image Processing, Vol. 6 No. 12, Dec. 1, 1997, pp. 1673-1686.   |                |
|                                 |                       | Wong, Ping Wah. "A Public Key Watermark for Image Verification and Authentication," IEEE International Conference on Image Processing, Vol. 1, Oct 4-7, 1998, pp. 455-459.  |                |
|                                 |                       | Fabien A.P. Petitcolas, Ross J. Anderson and Markkus G. Kuhn, "Attacks on Copyright Marking Systems," LNCS, Vol. 1525, April 14-17, 1998, pp. 218-238. ISBN: 3-540-65386-4  |                |
|                                 |                       | Ross Anderson, "Stretching the Limits of Steganography," LNCS, Vol. 1174, May/June 1996, 10 pages, ISBN: 3-540-61996-8.   |                |
|                                 |                       | Joseph J.K. O'Ruanaidh and Thierry Pun, "Rotation, Scale and Translation Invariant Digital Image Watermarking", pre-publication, Summer 1997, 4 pages.  |                |
|                                 |                       | Joseph J.K. O'Ruanaidh and Thierry Pun, "Rotation, Scale and Translation Invariant Digital Image Watermarking", Submitted to Signal Processing August 21, 1997, 19 pages.   |                |

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|                                 |                       | Rivest, R., "Chaffing and Winnowing: Confidentiality without Encryption", MIT Lab for Computer Science, <a href="http://people.csail.mit.edu/rivest/Chaffing.txt">http://people.csail.mit.edu/rivest/Chaffing.txt</a> , April 24, 1998, 9 pages                 |                |
|                                 |                       | PortalPlayer, PP5002 digital media management system-on-chip, May 1, 2003, 4 pages.   |                |
|                                 |                       | VeriDisc, "The Search for a Rational Solution to Digital Rights Management (DRM)", <a href="http://64.244.235.240/news/whitepaper/docs/veridisc_white_paper.pdf">http://64.244.235.240/news/whitepaper/docs/veridisc_white_paper.pdf</a> , 2001, 15 pages.      |                |
|                                 |                       | Cayre, et al., "Kerckhoffs-Based Embedding Security Classes for WOA Data Hiding", IEEE Transactions on Information Forensics and Security, Vol. 3 No. 1, March 2008, 15 pages.  |                |
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|   | <b>Examiner Name</b>          |  | Laurel LASHLEY              |
|   | <b>Attorney Docket Number</b> |  | 80391.0003                  |

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|  |                          | STAIN D (The Singles 1996-2006), Warner Music - Atlantic, Pre-Release CD image, 2006, 1 page  |                |
|  |                          | Arctic Monkeys (Whatever People Say I Am, That's What I'm Not), Domino Recording Co. Ltd., Pre-Release CD image, 2005, 1 page   |                |
|  |                          | Radiohead ("Hail To The Thief"), EMI Music Group - Capitol, Pre-Release CD image, 2003, 1 page.   |                |
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Application Number

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First Named Inventor

Scott A. MOSKOWITZ

Art Unit

2132

Examiner Name

Laurel L. LASHLEY

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|                    |                       | PCT International Search Report, completed Sept. 13, 1995; authorized officer Huy D. Vu (PCT/US95/08159) (2 pages)  |                |
|                    |                       | PCT International Search Report, completed June 11, 1996; authorized officer Salvatore Cangialosi (PCT/US96/10257) (4 pages)  |                |
|                    |                       | Supplementary European Search Report, completed Mar. 5, 2004; authorized officer J. Hazel (EP 96 91 9405) (1 page)  |                |
|                    |                       | PCT International Search Report, completed April 4, 1997; authorized officer Bernarr Earl Gregory (PCT/US97/00651) (1 page)   |                |
|                    |                       | PCT International Search Report, completed May 6, 1997; authorized officer Salvatore Cangialosi (PCT/US97/00652) (3 pages)  |                |
|                    |                       | PCT International Search Report, completed Oct. 23, 1997; authorized officer David Cain (PCT/US97/11455) (1 page)   |                |
|                    |                       | PCT International Search Report, completed July 12, 1999; authorized officer R. Hubeau (PCT/US99/07262) (3 pages)   |                |
|                    |                       | PCT International Search Report, completed June 30, 2000; authorized officer Paul E. Callahan (PCT/US00/06522) (7 pages)  |                |
|                    |                       | Supplementary European Search Report, completed June 27, 2002; authorized officer M. Schoeyer (EP 00 91 9398) (1 page)  |                |
|                    |                       | PCT International Search Report, date of mailing Mar. 15, 2001; authorized officer Marja Brouwers (PCT/US00/18411) (5 pages)  |                |

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|                                 |                       | PCT International Search Report, completed March 20, 2001; authorized officer P. Corcoran (PCT/US00/33126) (6 pages)  |                |
|                                 |                       | PCT International Search Report, completed January 26, 2001; authorized officer A. Sigolo (PCT/US00/21189) (3 pages)  |                |
|                                 |                       | European Search Report, completed October 15, 2007; authorized officer James Hazel (EP 07 11 2420) (9 pages)  |                |
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